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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|-----------------------|------------------|
| 09/470,116 | 12/22/1999 | RODNEY CLAYCOMB | DDX13 | 5798 |
| 20686 | 7590 | 07/15/2004 | EXAMINER | |
| DORSEY & WHITNEY, LLP INTELLECTUAL PROPERTY DEPARTMENT 370 SEVENTEENTH STREET SUITE 4700 DENVER, CO 80202-5647 | | | NATNITHITHADHA, NAVIN | |
| | | ART UNIT | PAPER NUMBER | |
| | | 3736 | Z/ | |

DATE MAILED: 07/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|----------------------------------|------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/470,116 | CLAYCOMB ET AL. |
| | Examiner Navin Natnithithadha | Art Unit 3736 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 22 October 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-21 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-21 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892) .
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Examiner's Comment

1. It is duly noted that the case was abandoned after midnight 8 February 2002 for failure to respond to a nonfinal Office Action of 8 November 2001. A petition filed on 29 July 2003 was dismissed on 22 August 2003 for failure to satisfy the "showing" and "reply" requirements of the regulations. A renewed petition was filed on 22 October 2003 with a reply in the form of an amendment was granted on 5 November 2003. The present Office Action is in response to the Amendment filed on 22 October 2003.

Response to Arguments

2. Applicant's arguments filed on 22 October 2003 with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

3. Claim 2 is objected to because of the following informalities:

The claim states "...wherein said information includes if said duration of said mounts meet a preset threshold of time and if a preset number of said mounts occur within a predetermined period time". If the two limitations are met, is there a limitation that will follow? The Examiner suggests amending "wherein said information includes" with the following:

-- wherein said electronic means further processes information to determine --.

The Examiner will interpret the claim as "said electronic means further processes information to determine if said duration of said mounts meet a preset threshold of time and if a preset number of said mounts occur within a predetermined period time".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

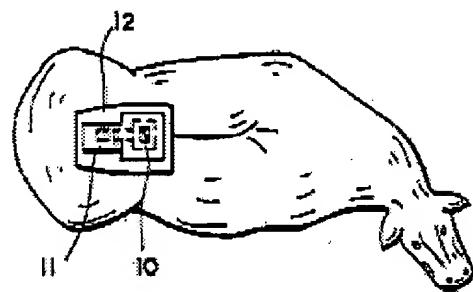
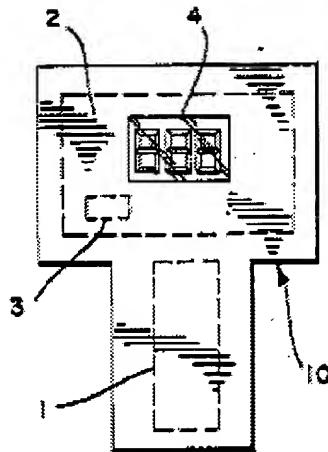
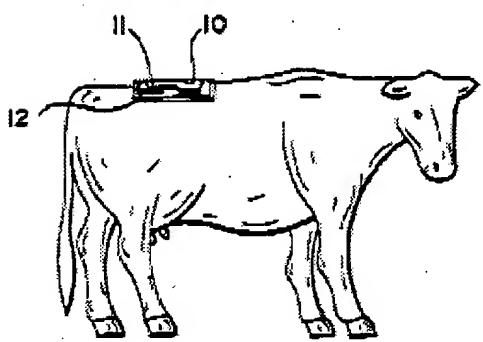
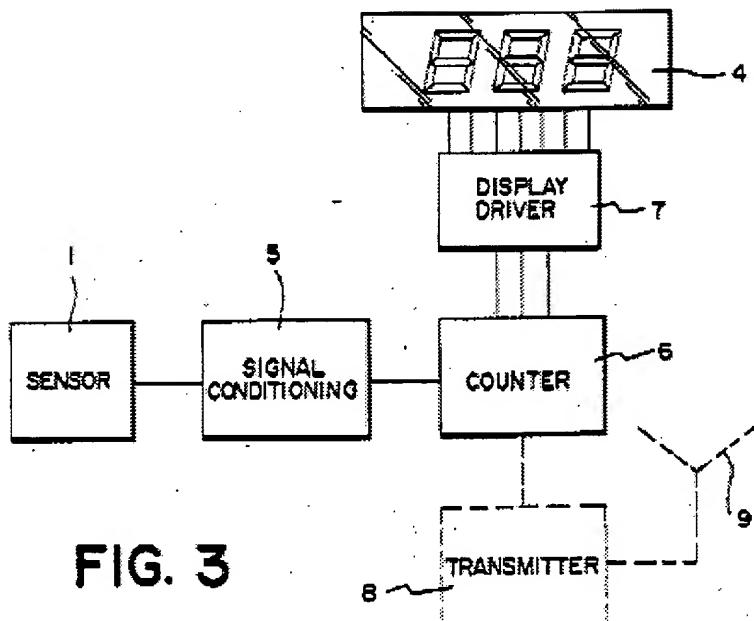
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5, 7-10, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Blair, US 4,895,165 A.

Claim 1: Blair discloses a self-contained electronic estrus detection device for optimum breeding time calculation and indication (see abstract) comprising:

a housing (detector) 10 for releasable placement on an animal (see figs. 1(a) and 1(b) below and see col. 2, lines 64-66); and

an electronic means (processing unit) 2 operatively associated with the housing 10 for detecting and processing information relating to number, duration, and frequency of mounts on the animal, the electronic means 2 calculating and indicating optimum time to breed based on the information (see col. 1, line 57 to col. 2, line 3; col. 3, lines 21-32 and 39-46; col. 3, line 62 to col. 4, line 5; and col. 5, lines 18-21).

FIG. 1(a)**FIG. 1(b)****FIG. 2****FIG. 3**

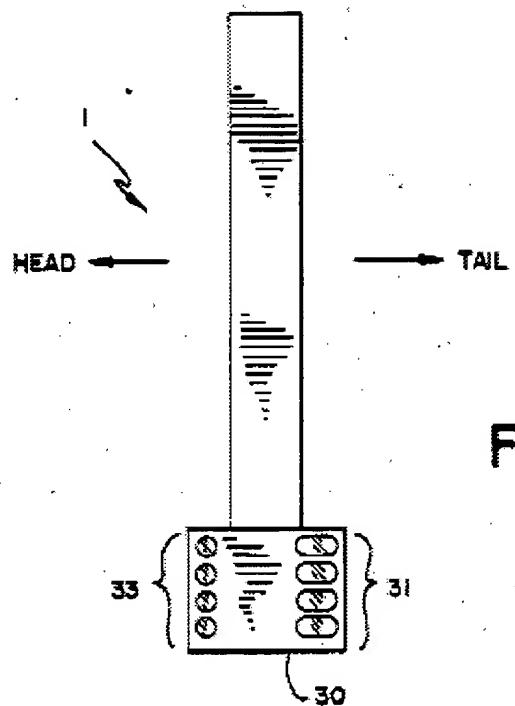


FIG. 6

Claim 2: Blair discloses the electronic means 2 further processes information to determine if the duration of the mounts meet a preset threshold of time (see col. 3, lines 21-36) and if a preset number of the mounts occur within a predetermined period of time (see col. 1, line 66 to col. 2, line 3 and col. 3, line 60 to col. 4, line 5).

Claims 3-5, 7, 8, and 10: Blair discloses the electronic means includes: a microprocessor (processing unit) 2 (see col. 2, lines 64-66), a battery (see col. 3, lines 2-3), a pressure sensitive switch (tapeswitch) 1 (see col. 2, lines 61-62), a visible display means 4 (see col. 2, lines 52-53), and a reset means (reset switch) 3 for resetting the electronic means (see col. 2, line 67 to col. 3, line 2).

Claim 9: Blair discloses the housing is hermetically sealed (see col. 2, lines 64-66).

Claim 21: Blair discloses a self-contained electronic estrus detection device for optimum breeding time calculation and indication (see abstract) comprising:

a housing (detector) 10 for releasable placement on an animal (see figs. 1(a) and 1(b) above and see col. 2, lines 64-66);

an electronic means (processing unit) 2 operatively associated with the housing 10 for detecting and processing information relating to number, duration, and frequency of mounts on the animal (see col. 1, line 57 to col. 2, line 3; col. 3, lines 21-32 and 39-46; col. 3, line 62 to col. 4, line 5; and col. 5, lines 18-21); and

an indicating means 30 for indicating the beginning and end of optimum time to breed based on the information (see col. 3, line 60 to col. 4, line 5).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6 and 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blair, US 4,895,165 A in view of Starzl et al, US 5,542,431 A.

Claim 6: Blair does not disclose the electronic means further calculates and indicates suspect estrus and confirmed estrus. However, Starzl et al disclose an electronic means indicates suspect estrus (identifying the onset of estrus) and confirmed estrus (determining the peak estrus) (see col. 4, lines 44-59). It would have

been obvious for one of ordinary skill in the art to modify Blair's device with Starzl et al because Blair suggest in column 5, lines 48-50 that the device can be easily adapted to different applications, such as indicating suspect estrus and confirmed estrus from the data obtained, by merely making slight changes to the electronic means (circuit) and indicating means in Blair's device.

Claim 11: Blair discloses a self-contained electronic estrus detection device for optimum breeding time calculation and indication (see abstract) comprising:

a housing (detector) 10 for releasable placement on an animal (see fig. 1(a) and 1(b) above and see col. 2, lines 64-66); and
indicating means 30 for indicating the optimum time to breed (see col. 3, line 62 to col. 4, line 5).

Blair does not disclose an indicating means for suspect estrus and confirming estrus. However, Starzl et al disclose an electronic means indicates suspect estrus (identifying the onset of estrus), confirmed estrus and optimum time to breed (determining the peak estrus) (see col. 4, lines 44-59). It would have been obvious for one of ordinary skill in the art to modify Blair's device with Starzl et al because Blair suggest in column 5, lines 48-50 that the device can be easily adapted to different applications, such as indicating suspect estrus and confirmed estrus from the data obtained, by merely making slight changes to the electronic means (circuit) and indicating means in Blair's device.

Claims 12-14: Starzl et al disclose (see col. 4, lines 44-67) estrus is determined by the duration of a first mount meeting and the preset threshold of time; confirmed estrus

is determined by the duration of the mounts meeting the preset threshold of time and the preset number of the mounts occurring within a predetermined period of time; and the optimum breeding time is a predetermined range of time from the first and the preset number of the mounts meeting the preset threshold and occurring within the predetermined period of time. It would have been obvious for one of ordinary skill in the art to modify Blair's device with Starzl et al because Blair suggest in column 5, lines 48-50 that the device can be easily adapted to different applications, such as indicating suspect estrus and confirmed estrus from the data obtained, by merely making slight changes to the electronic means (circuit) and indicating means in Blair's device.

Claim 15: Blair discloses the indicating means 30 located on the rear of the housing and comprises at least one LED (see fig. 6).

Claims 16 and 17: Blair discloses the indicating means comprises LED's for (see fig. 6). He does not disclose the LED's indicating either suspect estrus and confirmed estrus. However, Starzl et al discloses indicating suspect estrus, confirmed estrus and optimum time to breed (see col. 4, lines 44-67). It would have been obvious for one of ordinary skill in the art to modify Blair's device with Starzl et al because Blair suggest in column 5, lines 48-50 that the device can be easily adapted to different applications, such as indicating suspect estrus and confirmed estrus from the data obtained, by merely making slight changes to the electronic means (circuit) and indicating means in Blair's device.

Claims 18 and 19: Starzl et al disclose the preset threshold for mounting and the preset number of mounts for a period of time for peak estrus (see col. 4, lines 44-67). It

would have been obvious for one of ordinary skill in the art to modify Blair's device with Starzl et al because Blair suggest in column 5, lines 48-50 that the device can be easily adapted to different applications, such as indicating suspect estrus and confirmed estrus from the data obtained, by merely making slight changes to the electronic means (circuit) and indicating means in Blair's device.

Claim 20: Blair discloses a self-contained electronic estrus detection device for optimum breeding time calculation and indication (see abstract) comprising:

a housing (detector) 10 for releasable placement on an animal (see fig. 1(a) and 1(b) above and see col. 2, lines 64-66);

an electronic means (processing unit) 2 operatively associated with the housing 10 for detecting and processing information relating to number, duration, and frequency of mounts on the animal (see col. 1, line 57 to col. 2, line 3; col. 3, lines 21-32 and 39-46; col. 3, line 62 to col. 4, line 5; and col. 5, lines 18-21), the information forming the basis for determining if the duration of the mounts meet a preset threshold of time (see col. 3, lines 21-36) and if a preset number of the mounts occur within a predetermined period of time (see col. 1, line 66 to col. 2, line 3 and col. 3, line 60 to col. 4, line 5), the electronic means 2 calculating and indicating the optimum time to breed (see col. 3, line 62 to col. 4, line 5).

Blair does not disclose an indicating means for suspect estrus and confirming estrus. However, Starzl et al disclose an electronic means indicates suspect estrus (identifying the onset of estrus), confirmed estrus and optimum time to breed (determining the peak

estrus) (see col. 4, lines 44-59). It would have been obvious for one of ordinary skill in the art to modify Blair's device with Starzl et al because Blair suggest in column 5, lines 48-50 that the device can be easily adapted to different applications, such as indicating suspect estrus and confirmed estrus from the data obtained, by merely making slight changes to the electronic means (circuit) and indicating means in Blair's device.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Navin Natnithithadha whose telephone number is (703) 305-2445. The examiner can normally be reached on Monday-Friday, 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mary Beth Jones can be reached on (703) 308-3400. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Navin Natnithithadha
Patent Examiner
GAU 3736
June 28, 2004


MARY BETH JONES
ACTING SUPERVISORY PATENT EXAMINER